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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,874	04/16/2001	Mark Vange	CIRC014	5573

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HOGAN & HARTSON LLP
ONE TABOR CENTER, SUITE 1500
1200 SEVENTEENTH ST
DENVER, CO 80202

EXAMINER

EL HADY, NABIL M

ART UNIT PAPER NUMBER

2152

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,874

Applicant(s)

VANGE ET AL.

Examiner

Nabil M. El-Hady

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-15 and 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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1. Claims 1-22 are presented for examination. Claims 1 and 16 are cancelled.
2. Claim 10 is objected to because of the following informalities: the claim refers to a cancelled claim 1. . Appropriate correction is required.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 2- 4, 10-13, 17, and 20-22 rejected under 35 U.S.C. 102(e) as being anticipated by Wong (US 5,974,465).
5. As per claim 2, Wong discloses the invention as claimed including a method for transmitting packets from a computer onto a network (Figs. 1 and 2), said method comprising the acts: receiving at least two data sets (205-207, Fig. 2); determining a priority value for each of the at least two data sets (208, Fig. 2); composing a composite data set comprising portions of the at least two data sets such that an amount of data from each of the data sets within the composite data set is based upon relative priorities between each of the at least two data sets (209, Fig. 2); and transmitting the composite data set onto the network (105, Fig. 2), wherein the act of receiving comprises creating a group comprising a plurality of connection buffers for each data set (209, Fig. 2) ; and assigning a priority to each created group (208, Fig. 2; and Fig. 3).

6. As per claims 3 and 4, Wong does not disclose monitoring the speed of the connection supplying data to each connection buffer and adjusting the size of the corresponding connection buffer to maintain a buffer sized to hold packets received over a preselected time interval.

Official notice is taken that the both the concept and advantages of monitoring the speed of the connection supplying data to each connection buffer and adjusting the size of the corresponding connection buffer to maintain a buffer sized to hold packets received over a preselected time interval is well known and expected in the art. It would have been obvious to one skilled in the art at the time of the invention to monitor and adjust the size of the corresponding connection buffer to maintain a buffer sized to hold packets received over a preselected time of at least the time required to complete the composing step in order to maintain enhancing the queuing mechanism of the system.

7. As per claim 10, Wong discloses transmitting the prioritized packets to a second networked computer over the Internet (Figs. 1 and 2).

8. As per claim 11, Wong discloses receiving the prioritized packets from at least one client (101-103, Fig. 2).

9. As per claim 17, Wong discloses the invention as claimed including a system for transmitting packets from a buffer of a network computer onto a network (209, 105, Fig. 2), said system comprising: a buffer to store a plurality of packets received from at least one client (209, Fig. 2); at least two packets stored in the buffer, wherein each of the packets has a priority value that at least partially determines a queue order for transmitting (col. 4, lines 1-12); and a

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transmitter to transmit prioritized packets from the buffer (105, Fig. 2); wherein the buffer is part of an intermediary web server that receives packets from the at least one client (104, Fig. 2; and col. 3, lines 61-62); and the network is the internet (col. 3, lines 25-30).

10. As per claim 20, Wong discloses the networked computer transmits the prioritized packets to a second networked computer over the internet (Figs. 1 and 2).

11. As per claims 12 and 21, Wong discloses the prioritized packets are received by an originating server (208, Fig. 2).

12. As per claims 13 and 22, Wong discloses transmitting the prioritized packets to a second networked computer and receiving prioritized packets from the second networked computer (101-103, 108-110, Fig. 1; and Fig. 2)).

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5-6 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Robotham et al. (US 6,510,158), hereinafter "Robotham".

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15. As per claims 5 and 18, Wong does not disclose determining a weight value for each data set and selecting portions of the first and second data sets in an order at least partially based upon the weight value. Robotham, on the other hand, discloses determining a weight value for each data set and selecting portions of the first and second data sets in an order at least partially based upon the weight value. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong and Robotham in order to enhance the priority queuing mechanism of Wong.

16. As per claims 6 and 19, Wong discloses creating a connection buffer for each data set (209, Fig. 2). However, Wong does not disclose organizing the connection buffers into logical rings of like priority value; selecting portions of data from each logical ring at a frequency at least partially reflecting the relative priority of the logical rings. Robotham, on the other hand, discloses organizing the connection buffers into logical rings of like priority value (abstract); selecting portions of data from each logical ring at a frequency at least partially reflecting the relative priority of the logical rings (abstract)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong and Robotham in order to enhance the priority queuing mechanism of Wong.

17. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of McCloghrie et al. (US 6,386,052), hereinafter "McCloghrie".

18. As per claim 14, Wong does not explicitly disclose parsing the data sets and determining the priority value at least partially based on the parsed data sets. McCloghrie, on the other hand, parsing the data sets and determining the priority value at least partially based

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on the parsed data sets (col. 16, lines 25-33).It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Wong and McCloghrie in order to enhance the prioritizing mechanism of Wong and to determine packet priorities in accordance with the required service.

19. As per claim 15, Wong does not explicitly disclose receiving prioritization rules from an external content server associated with at least one of the data sets and determining the priority value at least partially based on the prioritization rules. McCloghrie, on the other hand, discloses receiving prioritization rules from an external content server associated with at least one of the data sets and determining the priority value at least partially based on the prioritization rules (col. 16, lines 25-51). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Wong and McCloghrie in order to enhance the prioritizing mechanism of Wong and to determine packet priorities in accordance with the required service.

20. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Robotham and further in view of McCormack et al. (US 6,112,267), hereinafter "McCormack".

21. McCormack is cited in a previous office action.

22. As per claims 7 and 8, Wong and Robotham do not specifically disclose determining for each logical ring a number of bytes held by all the connection buffers within that ring (nBytes); determining for each ring the number of connection buffers it holds that have data waiting to be

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sent (nReady); determining a number of bytes to be sent from each logical ring. McCormack, on the other hand, discloses determining for each logical ring a number of bytes held by all the connection buffers within that ring (nBytes) (e.g. col. 6, lines 56-65); determining for each ring the number of connection buffers it holds that have data waiting to be sent (nReady) (e.g. col. 6, lines 56-65); determining a number of bytes to be sent from each logical ring (e.g. col. 6, lines 56-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong, Robotham and McCormack in order send information from the correct buffer and provide the total size of the buffer rings.

23. As per claim 9, Wong, Robotham and McCormack do not specifically disclose the number of logical rings is "n" defining n discrete priority levels labeled 0 to n-1, and selecting sub-packets from each of the rings in having a selection pattern substantially matching a specific selection round/ logical ring pattern as claimed. However, a selection pattern substantially matching a specific selection round/ logical ring pattern may be considered a matter of design choice.

24. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

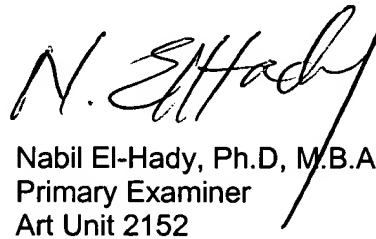
25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 17, 2005


Nabil El-Hady, Ph.D, M.B.A.
Primary Examiner
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